

Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

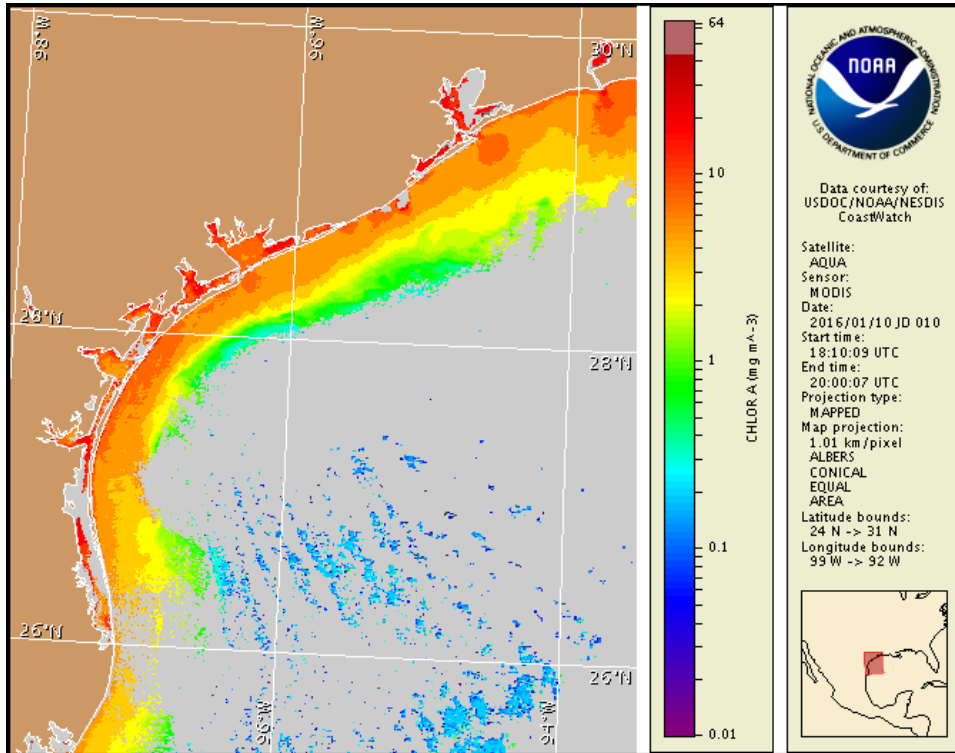
Monday, 11 January 2016

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, January 4, 2016



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from January 1 to 8: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information can be obtained through the Texas Parks and Wildlife Department at:

<http://www.tpwd.state.tx.us/landwater/water/envconcerns/hab/redtide/status.phtml>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive:

<http://tidesandcurrents.noaa.gov/hab/bulletins.html>

Conditions Report

Karenia brevis (commonly known as Texas red tide) ranges from not present to very low concentrations along the coast of Texas. No respiratory irritation is expected Monday, January 11 through Tuesday, January 19.

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations.

Analysis

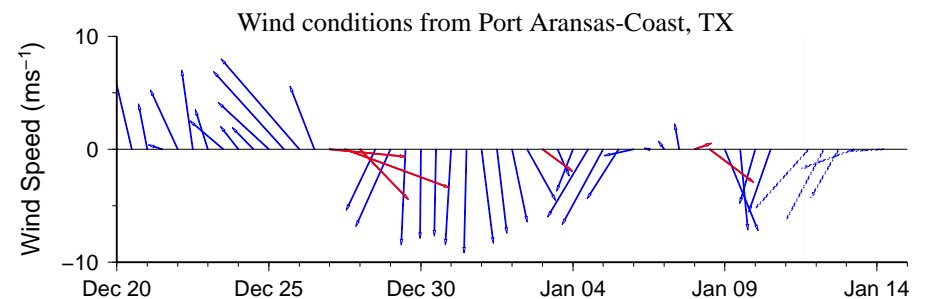
****Due to the upcoming federal holiday, the next bulletin will be issued on Tuesday, January 19.****

Sampling from the Texas A&M University's Imaging FlowCytobot, located on the Port Aransas ship channel, indicates *Karenia brevis* concentrations range between 'background' and 'very low b' (TAMU; 1/5-11). For information on area shellfish restrictions, contact the Texas Department of State Health Services.

In recent MODIS Aqua imagery (1/10, shown left) patches of elevated to high chlorophyll (2-15 $\mu\text{g/L}$) are visible along- and offshore the Texas coast from Sabine Pass to the Padre Island National Seashore. Elevated chlorophyll is not indicative of the presence of *K. brevis* and is most likely due to the resuspension of benthic chlorophyll and sediments along the coast.

Forecast models based on predicted near-surface currents indicate a potential maximum transport of 130 km south from the Port Aransas region from January 10-14.

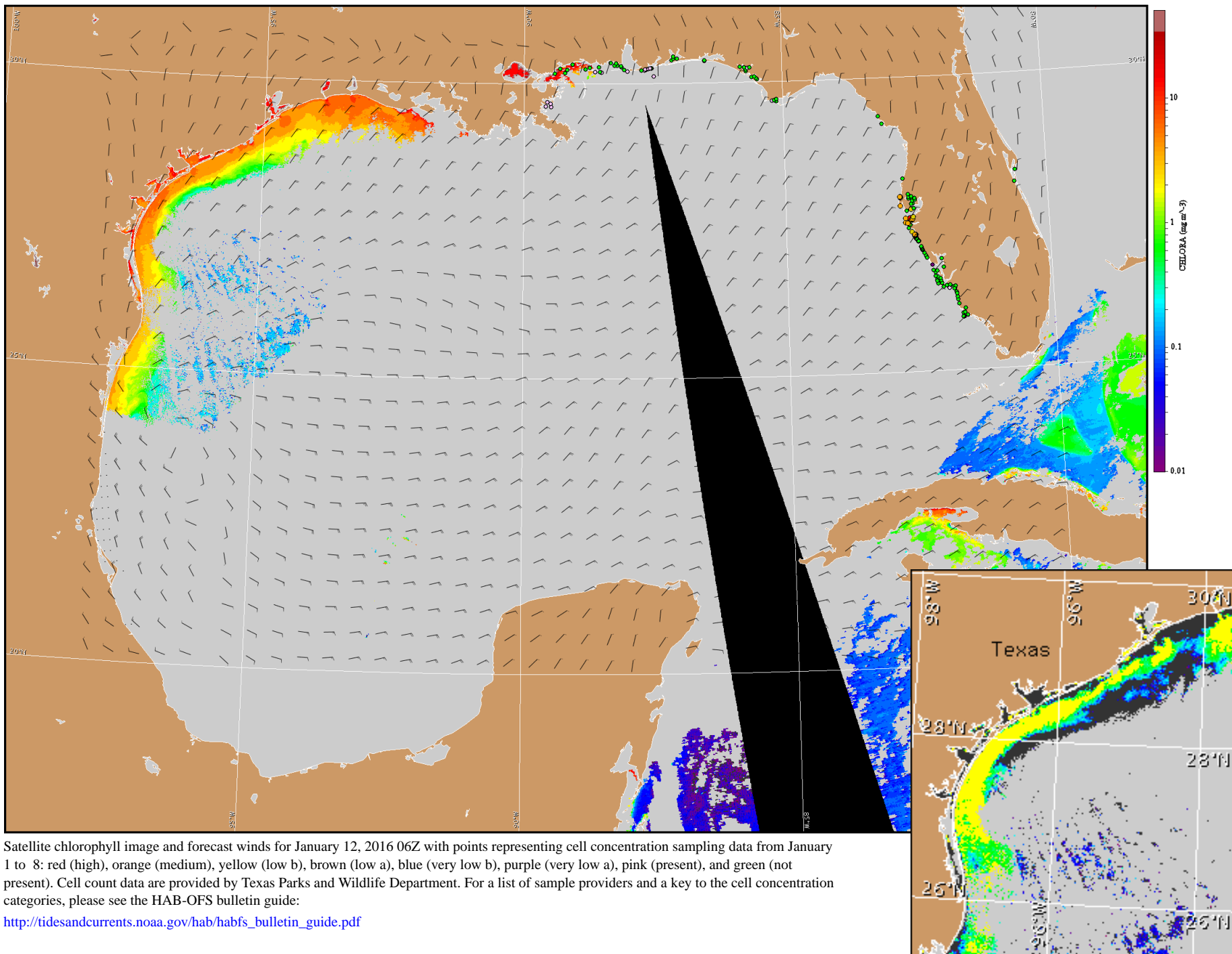
Lalime, Kavanaugh



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

Wind Analysis

Port Aransas to Baffin Bay: Northeast to east winds (5-15kn, 3-8m/s) today through Thursday. South winds (5-10kn, 3-5m/s) Thursday night shifting southwest after midnight. West to northwest winds (5-15kn) Friday.



Satellite chlorophyll image and forecast winds for January 12, 2016 06Z with points representing cell concentration sampling data from January 1 to 8: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).